MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2016/2017

BAC 2624 – MANAGEMENT ACCOUNTING II

(All sections / Groups)

2 JUNE 2017
9 a.m. – 12 p.m.
(3 Hours)

INSTRUCTIONS TO STUDENTS

1. This paper consists of 5 pages excluding cover page with 4 Questions only.
2. Answer **ALL** questions.
3. All questions carry equal marks and the distribution of marks for each question is given.
4. Please write all your answers in the Answer Booklet provided.

QUESTION 1

PART A

Mattress Enterprise purchases old tyres and recycles them to produce rubber floor mats and car mats. The company washes, shreds, and molds the recycled tyres into sheets. The floor and car mats are cut from these sheets. A small amount of rubber shred remains after the mats are cut. The rubber shred can be sold to use as cover for paths and playgrounds. The company can produce 25 floor mats, 75 car mats, and 40 pounds of rubber shreds from 100 old tyres.

In May, Mattress Enterprise which had no beginning inventory, processed 125,000 tyres and had joint production costs of RM600,000. Mattress Enterprise sold 25,000 floor mats, 85,000 car mats, and 43,000 pounds of rubber shreds. The company sells each floor mat for RM12 and each car mat RM6. The company treats the rubber shreds as a byproduct that can be sold for RM0.70 per pound.

Required:

i. Assume that Mattress Enterprise allocates the joint costs to floor mats and car mats using the sales value at splitoff method and accounts for the byproduct using the production method. What is the ending inventory cost for each product and gross margin for Mattress Enterprise?

(10 marks)

ii. Distinguish between a joint product and a byproduct.

(5 marks)

PART B

1. XYZ operates several process production systems.

   For Process 5, the FIFO method of valuing opening work-in-progress is used, and the following details relate to September 2016.

   - Opening work-in-process was 600 units, each 80% processed as to materials and 60% processed as to conversion costs.
   - Started during the month was 14,500 units. There were no abnormal losses or gains.
   - Closing work-in-process was 800 units, each 70% processed as to materials and 40% processed as to conversion costs.

   Costs of processing during the current period were:
   Materials: RM36,450
   Conversion costs: RM17,352.

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Required:
Calculate the cost per equivalent unit of output produced during September 2016.
(5 marks)

2. The following details relate to Process 16 in September 2016:

Opening work-in-progress	2,000 litres, fully complete as to materials and 40% complete as to conversion. The cost of materials in the opening WIP was RM9,860 and conversion costs in the opening WIP were RM4,700.
Material input	24,000 litres, cost RM130,540
Conversion costs in the month	RM82,960
Output to the next process	23,000 litres; Normal loss 5% of good units
Closing work-in-progress	1,500 litres, fully complete as to materials and 45% complete as to conversion.

The weighted average cost system is used for inventory valuation in Process 16.

Required:
Calculate the cost per unit of output from this process during September 2016.
(5 marks)
[TOTAL: 25 MARKS]

QUESTION 2

PART A

You are currently evaluating on an appraisal of a project to purchase a new machine in a company which you have been appointed as an assistant accountant. The machine will cost RM65,000 and will have a useful life of three years. You have already estimated the cash flows from the project and their taxation effect, and the results of your estimates can be summarized as follows:

	Year 1	**Year 2**	**Year 3**
After-tax cash inflow	RM20,000	RM32,000	RM29,000

Your company uses an after-tax cost of capital of 8% to appraise all projects of this type:

Note:

	Year 1	**Year 2**	**Year 3**
Discount factor (8%)	0.926	0.857	0.794

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Required:

i. Calculate the net present value of the proposal to purchase the machine. Ignore the effects of inflation and assume that all cash flows occur at the end of the year.

(5 marks)

ii. Calculate the payback period for the investment in the machine.

(2 marks)

iii. The marketing director has asked you to let her know as soon as you have completed your appraisal of the project. She has asked you to provide her with some explanation of your calculations and of how taxation affects the proposal.

Required:
Prepare a memorandum to the marketing director which answers her queries. Your memorandum should contain the following:

a) Your recommendation concerning the proposal to purchase a new machine.
b) An explanation of the meaning of the net present value and the payback period.
c) An explanation of the effects of taxation on the cash flows arising from capital expenditure.

(6 marks)

PART B

A company uses 15,000 units of stock item 6786 each year. The item has a purchase cost of RM4 per unit. The cost of placing an order for re-supply is RM220. The annual holding cost of one unit of the item is 10% of its purchase cost.

Required:

i. What is the economic order quantity for item 6786, to the nearest unit?

ii. What would be the effect of an increase in the annual holding cost per unit on (a) the EOQ and (b) total annual ordering costs?

(6 marks)

iii. Data relating to stores item 6787 are as follows.

Daily use:	300 units
Lead time for re-supply:	20 days
Reorder quantity:	10,000 units

Required
What should be the reorder level for this stock item, to avoid the possibility of stock-outs?

(2 marks)

iv. Briefly describe:

a) stock out costs
b) carrying costs

(4 marks)

[TOTAL: 25 MARKS]

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QUESTION 3

Perfect Chemical Sdn. Bhd. manufactures a wide variety of chemical products for industrial purposes. The standard mix for producing one unit of Doroxaline follows:

Compound F	5kgs at RM2 per kg	RM10
Compound B	10kgs at RM3 per kg	RM30
Total	**15kgs**	**RM40**

The actual quantities and the cost of direct materials placed in the production were as follows:

	Quantity	**Total costs**
Compound F	500kgs	RM1,050
Compound B	730kgs	RM2,117
Total	**1,230 kgs**	**RM3,167**

In a particular period, 80 units of Doroxaline were produced from 500 kg of compound F and 730kg of compound B.

Required:

a) Describe the purpose of variance analysis.
(3 marks)

b) Calculate the total material price variance.
(4 marks)

c) Calculate the total material usage (efficiency) variance.
(4 marks)

d) Calculate the total material mix variance.
(5 marks)

e) Compute the total material yield variance
(5 marks)

f) Interpret the mix and yield variances.
(4 marks)

[TOTAL: 25 MARKS]

QUESTION 4

Premiereware Sdn. Bhd. produces high quality copper pots and pans. Desmond Lee, one of the company's price analysts, is involved in setting a price for the company's new Starter Set.

This set consists of seven of the most commonly used pots and pans. During the next year, the company plans to produce 10,000 Starter Sets, and the accountant has provided Desmond Lee with the following cost data:

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Predicted costs of 10,000 Starter Sets (RM)	
Direct material per set	60
Direct labour per set, 2 hours @ RM20 per hour	40
Variable selling costs per set	5
	105

Variable overhead rate:	RM8 per direct labour hour
Fixed production overhead rate:	RM12 per direct labour hour
Total fixed production overhead	RM240,000
Total fixed selling and administrative cost	RM20,000

The company has adopted the full production cost plus pricing method to set the price.

Required:

a) Calculate the total variable production cost and full production cost of a Starter Set.
(4 marks)

b) Determine the selling price and the mark up percentage of a Starter Set in order to earn a target profit of RM317,500 based on 10,000 Starter Sets for next year.
(9 marks)

c) Premiereware Sdn. Bhd. was invited to bid on an order to supply 100 Starter Sets. What is the lowest price per unit (with a mark up of 30%) they should bid on this one-time-only special order? Note: there is no variable selling costs in contract sales.
(3 marks)

d) A large hotel chain is currently expanding and has decided to purchase Starter Set from Premiereware Sdn. Bhd. What is the lowest price per unit (with a mark up of 30%) they should bid on this long-term order? Note: there is no variable selling costs in contract sales.
(3 marks)

e) Name and elaborate three factors that may influence the level of mark up.
(6 marks)

[TOTAL: 25 MARKS]

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